

What is Claimed is:

1. A vibration motor comprising:
  - a rotor having an eccentric mass;
  - 5 a stator for supporting rotation of the rotor;
  - a stationary shaft inserted into a rotation center of the rotor and having upper and lower ends supported by the stator;
  - a bearing having upper and lower ends smaller in cross sectional area than a central portion of the bearing, and
  - 10 coupled with the rotor at the rotation center thereof to contact an outer periphery of the stationary shaft;
  - a first washer mounted on an inner and upper central portion of the stator for elastically supporting the stationary shaft, and being in contact with an upper face of the stationary
  - 15 shaft; and
  - a second washer being in contact with a lower end of the bearing and mounted on the stator around the stationary shaft to support the rotor.
- 20 2. The vibration motor as set forth in claim 1, wherein the rotor includes a coil and a commutator having a plurality of segments for alternating electric power to the coil, and wherein the stator includes a magnet mounted in a position corresponding to the position of the coil of the rotor and a
- 25 brush contacting the commutator for applying electric power.

3. The vibration motor as set forth in claim 1, wherein the stator includes a coil and an Integrated Circuit (IC) chip for alternating electric power to the coil, and wherein the rotor includes a magnet.

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4. The vibration motor as set forth in claim 1, wherein the stator has a recess formed in an inner and upper central portion thereof, and wherein the first washer is positioned to cover the recess.

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5. The vibration motor as set forth in claim 1, wherein the stator has a projected column in an inner and lower central portion thereof for receiving the stationary shaft, and wherein the second washer is placed on a top of the projected column.

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6. The vibration motor as set forth in claim 5, wherein the projected column is coupled with a bush for applying clamping force, and the second washer is placed on a top of the bush.

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7. The vibration motor as set forth in claim 1, wherein the first and second washers have an outside diameter larger than that of the bearing.

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8. The vibration motor as set forth in claim 1, wherein

the bearing has tapered upper and lower ends.

9. The vibration motor as set forth in claim 1, wherein the bearing has rounded edges in upper and lower ends.

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10. A vibration motor comprising:

a magnetic bracket mounted with a coil and an Integrated Circuit (IC) chip for supplying AC power to the coil, the bracket having a projected column formed with a through hole in a central  
10 portion of the projected column;

a housing for covering the bracket, the housing having an internal space and a recess formed in an upper central portion of the housing;

a stationary shaft having a first end portion inserted  
15 into the projected column and a second end portion inserted into the recess;

a yoke having at least one magnet mounted on an underside of the yoke, the magnet being magnetized into a plurality of poles, and a weight for introducing eccentric mass attached to  
20 the yoke;

a bearing having upper and lower ends smaller in cross sectional area than a central portion of the bearing, and coupled with the rotor at the rotation center thereof to contact an outer periphery of the stationary shaft;

25 a first washer arranged in the recess for elastically

supporting the stationary shaft, and being in contact with an upper face of the stationary shaft; and

a second washer being in contact with a lower end of the bearing and mounted on the stator around the stationary shaft  
5 to support the rotor.

11. The vibration motor as set forth in claim 10, wherein the coil and the IC chip for supplying AC power to the coil are provided on an inner lower face of the housing.

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12. The vibration motor as set forth in claim 10, wherein the first and second washers have an outer diameter smaller than that of the bearing.

13. The vibration motor as set forth in claim 10, wherein  
15 the bearing has tapered upper and lower ends.

14. The vibration motor as set forth in claim 10, wherein the bearing has rounded edges in upper and lower ends.

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15. The vibration motor as set forth in claim 10, wherein the projected column is coupled with a bush for applying clamping force, and the second washer is placed on a top of the bush.

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